

# CITY OF LINCOLN BUILDING & SAFETY

## updates

July 2010

### Request by **LES** to Electrical Contractors

Lincoln Electric System has requested your help. There has been many service permit applications that are submitted without their necessary information filled out. Please remember that the top section of an electrical permit application needs to be filled out entirely for LES to process service permits. You should always be including the billing name and address, job address, and phone contact information. You also need to be completing the power and metering sections as well. This information is required on all applications for temporaries, permanent services, upgrades, rewires, and repairs. Omitting this information can lead to costly delays on construction, and liability if damage occurs during an upgrade or repair to existing services. If you have questions on how to fill out the LES information portion on the permit application please contact Julie Wismer at 467-7605. Remember that complete and accurate service permit applications will ensure that LES serves you and your customers in the best possible manner.

## Building & Safety Department

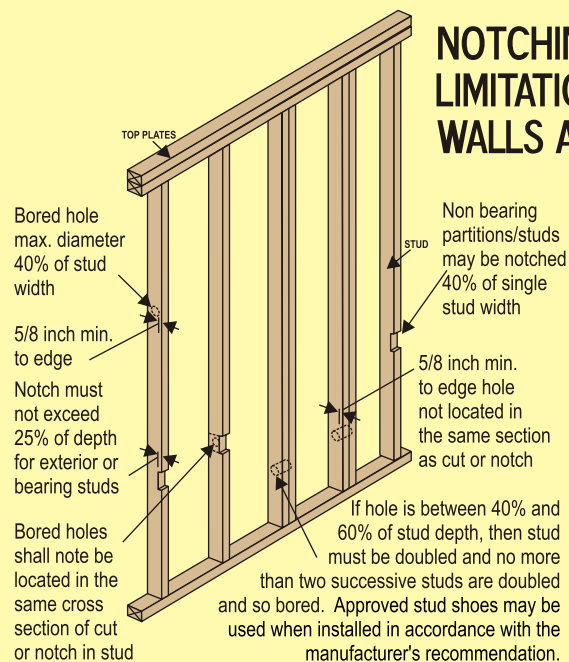
555 S. 10th Street  
Room 203  
Lincoln, NE 68508-3995

Chuck Zimmerman,  
Interim Director  
402/441-6452



designed by Citizen Information Center 07/2010

## NOTCHING AND BORED HOLE LIMITATIONS FOR EXTERIOR WALLS AND BEARING WALLS



### Drilling and notching of top plate.

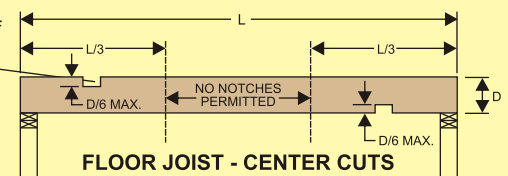
When piping or ductwork is placed in or partly in an exterior wall or interior, braced or load-bearing wall, necessitating a cutting of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (16 gage) and 1.5 inches wide shall be fastened to each plate across and to each side of the opening with not less than six 16d nails.

**Exception:** When the entire side of the wall with the notch or cut is covered by wood structural panel sheathing.

*International Residential Code*

## CUTTING, NOTCHING AND BORING IN SOLID LUMBER JOISTS, RAFTERS AND BEAMS

Notch depth shall not exceed 1/6 of depth of member and length not longer than 1/3 of member depth

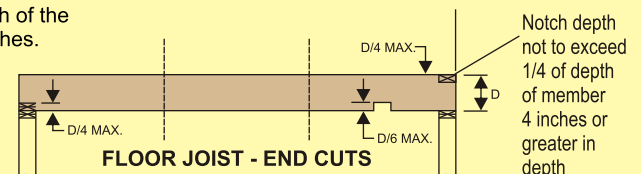
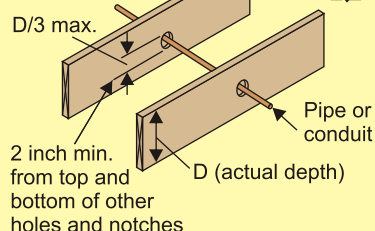


FLOOR JOIST - CENTER CUTS

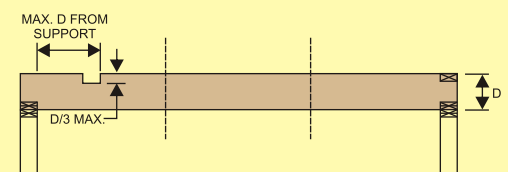
**Exception:** Notches on cantilevered portions of rafters are permitted provided the dimension of the remaining portion of the rafter is not less than 4-inch nominal and the length of the cantilever does not exceed 24 inches.

### RAFTER/CEILING JOISTS

Holes not to exceed 1/3 of depth



FLOOR JOIST - END CUTS



## An Electrical Problem for Plumbing Contractors and Water Softener Installers

I would like to revisit an issue that has been showing up with greater frequency as the use of non metallic water piping becomes even more prevalent than it had been the last time a newsletter was sent by Building and Safety. There has been a rise in the amount of electrical complaints that I receive due to this problem which has made it necessary to readdress. As most of you are probably aware, for decades the electrical industry had used metal water piping as a way to provide a ground connection for our services and even the receptacles and lights in older homes. This was actually the code preferred method for quite some time. Although the practice of using the interior metal piping for downstream grounding has been deleted from our code, it does not mandate that all older homes be upgraded to current standards.

As a reminder to all of you using plastic water piping please be aware that when repairing, replacing, or modifying existing metal interior piping that you may be having an effect on electrical grounding in that structure. The continuity of the metal piping systems in these structures is imperative to eliminate shock and electrocution hazards. It also has a big effect on how well the system will be able to deal with direct and indirect lightning strikes.

Whenever you use non metallic components in an existing metallic piping system try to remember that electrical issues will become a factor in what you are trying to accomplish, and you could be held liable for any damages or deaths resulting from the ungrounded situation you create. If you have any concerns that a system you are working with might have this type of grounding, for your safety as well as others I urge you to contact an Electrical Contractor to determine what may be necessary to address this issue.

I thank you all for your cooperation in this matter, and if I can be of further assistance please contact me at 441-6414.

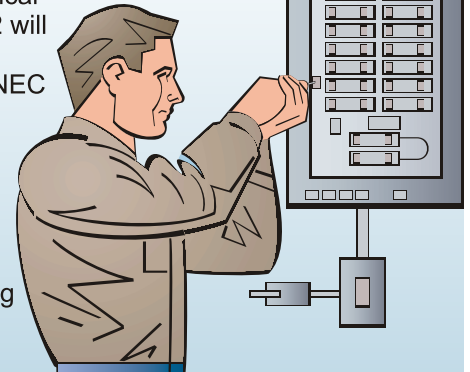
Ed Bergstraesser  
Chief Electrical Inspector  
City of Lincoln/Lancaster County

## Permitting All Installed Items

There are a number of jobs that the items reflected on the permit do not match the number of items being installed. Please remember to fill out your permits as accurately as possible and if necessary prior to the inspection submit a supplement to your permit to accurately reflect your project. Any items not permitted at the time of inspection are subject to a double fee in accordance 23.10.520 of the electrical code.

## Adoption of the 2008 National Electrical Code by the State of Nebraska, 2nd Notice!

The State of Nebraska has adopted the 2008 NEC effective July 12, 2010. An earlier notice mistakenly gave July 14 as the effective date so please take note that electrical permits issued after July 12 will require AFCI protection in accordance with the 2008 NEC here in Lincoln. Please remember that the only thing that changes for Lincoln is the expansion of the AFCI requirement from bedrooms to the other habitable areas in a dwelling that does not require GFCI protection.



## NEW PROCEDURE for Electrical Permits for HVAC Replacement Equipment

Effective October 1, 2010 there will be a new process for handling electrical permits associated with HVAC replacement equipment. The electrical section will be sending out a notice of "no permit" immediately upon receipt of a mechanical permit application for replacement equipment to the electrical contractor that is named by the mechanical installer. You will have 15 days to determine if you are going to be responsible for the electrical portion of the project and to send in your electrical permit application. Failure to return applications in that time frame will result in the permit fee being doubled for that project, so please get your applications in as soon as possible to avoid the double fee. As a reminder the electrical code does require a contractor to obtain a permit prior to doing the actual work.

## Requesting Final inspections on All Permits

There are a number of permits still in issued status that in all likelihood have been completed, but our records reflect no request for a final inspection. Please contact Nancy at 441-6413, or use your online access to determine if you have open permits that still need a final inspection. Remember that you are responsible for providing the inspector access to these inspections, so please do not call them in without making arrangements for access.

## License Registration Renewals

There are a considerable number of Journeyman and Apprentice electricians who have failed to re-register their State Electrical License's with the City of Lincoln. If any of your employees working in Lincoln do not have their license registered with the City please see to it that they get this done as soon as possible. The inspectors will be checking job sites for current licenses and compliance with the journeyman to apprentice ratio, even when these projects are not scheduled for inspections. As a reminder the electrical code makes you as the contractor responsible if you are sending people to do work that they are not properly licensed and registered for.

